6th Annual Deterrence Workshop Winning Conventional Regional Wars Against Nuclear-Armed

Annotated Bibliography

Adversaries

November 20-21, 2019

Center for Global Security Research
LAWRENCE LIVERMORE NATIONAL LABORATORY

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Winning Conventional Regional Wars Against Nuclear-Armed Adversaries 6th Annual Deterrence Workshop

Center for Global Security Research Livermore, California, November 20-21, 2019

Prepared by: Brandon Cortino, Pablo Alonso Garcia, William Heerdt,
Jacek Durkalec, Anna Peczeli

Key Questions:

- 1. What are the particular challenges of winning a conventional regional war against a nuclear-armed adversary?
- 2. How are those challenges best met?
- 3. Do we have the right concepts? How can the necessary concepts best be integrated into a "blue theory of victory?"

Panel Topics:

- 1. The NDS, NPR, MDR, NDS Commission, and Subsequent Progress
- 2. Russia's Theory of Victory in Crisis and Regional War
- 3. China's Theory of Victory in Crisis and Regional War
- 4. Gray Zone Strategies to Gain Wartime Advantages
- 5. A Blue Theory of Victory in Regional War under Red's Nuclear Shadow
- 6. And What if the War Remains Neither Conventional nor Regional?
- 7. Defining the Particular Requirements of Deterrence in the 2nd Theater
- 8. On Out-Partnering and Out-Thinking US Adversaries on this Topic

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Key Documents:

- United States Department of Defense. Summary of the National Defense Strategy. Washington DC, 2018. https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf.
- 2. National Defense Strategy Commission. *Providing for the Common Defense: The Assessment and Recommendations of the National Defense Strategy Commission*. Washington DC, November 2018. https://www.usip.org/sites/default/files/2018-11/providing-for-the-common-defense.pdf.

Panel 1: The NDS, NPR, MDR, NDS Commission, and Subsequent Progress

- In the ideas reflected in the policy and posture reviews of 2017 and 2018, is there a coherent theory of US/allied success in regional conventional wars against nuclear-armed adversaries? If so, what is it? If not, where are the gaps?
- What were the key concerns of the NDS commission?
- What progress has been made in 2019 in addressing those concerns?

McInnis, Kathleen. "Evaluating DOD Strategy: Key Findings of the National Defense Strategy Commission." Congressional Research Service, IF11139, March 2018. https://crsreports.congress.gov/product/pdf/IF/IF11139.

The paper published by the Congressional Research service summarizes the main findings of the congressionally appointed bipartisan National Defense Strategy Commission (NDSC). It highlights key areas of the commission's concerns, including: 1) a lack of sufficient analytic rigor of the concepts and programs DOD has proposed in order to better prepare the military for great power competition; 2) an urgent need for updating operational concepts; 3) insufficient innovation relative to the scope of the challenges; and 4) a mismatch between DOD's goals as articulated in the National Defense Strategy (NDS) and available resources.

Colby, Elbridge. "Testimony Before The Senate Armed Services Committee Hearing on Implementation of The National Defense Strategy." U.S. Senate, Washington D.C, 2019. https://www.armed-services.senate.gov/imo/media/doc/Colby 01-29-19.pdf.

In testimony before the Senate Armed Services Committee, Colby recaps his personal involvement in creating the NDS and the key elements of the strategy. He lays down several measures he believes can contribute to successful implementation of the strategy in the short term. These measures include making progress on developing innovative operational concepts, matching force structure with an appropriately sized budget, a force posture with high readiness, and close cooperation with allies and partners.

Berger, Rick, and Mackenzie Eaglen. "Hard Choices and Strategic Insolvency: Where the NDS Falls Short." War on the Rocks, May 2019.

https://warontherocks.com/2019/05/hard-choices-and-strategic-insolvency-where-the-national-defense-strategy-falls-short/.

In this critical review, the authors argue that the NDS and its associated force planning construct do not adequately account for the full breadth and scope of what the U.S. military is asked to do. Carrying out the actual requirements of the U.S. strategy is also unlikely, given insufficient defense spending and unrealistic hopes for the U.S. ability to prioritize threats and missions.

Dougherty, Chris. "Strategy or Straitjacket? Three Reasons Why People Are Still Arguing About the National Defense Strategy." *War on the Rocks*, August 2019. https://warontherocks.com/2019/08/strategy-or-straitjacket-three-reasons-why-people-are-still-arguing-about-the-national-defense-strategy/.

In this paper Dougherty responds to critics of the NDS. He points out that by prioritizing China and Russia, the strategy made actual hard choices. He also defends the merit of seeking savings, both in terms of dollars and spent readiness and weaponry, by reducing U.S. operations and force presence in the Middle East and Central Asia. Dougherty asserts that the NDS "prioritized the important over the urgent" and provides guidelines on how to balance near-term demands or emerging threats against the long-term strategic goals. In his view, successful implementation of the NDS requires senior policymaker support to reprioritize, and create a force fully capable of defeating near-peer adversaries.

Ochmanek, David. "Restoring US Power Projection Capabilities: Responding to the 2018 National Defense Strategy." *Perspective*, RAND Corporation, PE-260-AF, 2018. https://www.rand.org/pubs/perspectives/PE260.html.

In this paper Ochmanek addresses the NDS conclusion that the U.S. military's capabilities have been eroding vis-à-vis those of key adversaries, especially China and Russia. In his assessment, the restoration of the U.S. forces ability to defeat aggression by these adversaries requires new approaches to power projection. He offers elements of a new approach and identifies priority investment areas.

Panel 2: Russia's Theory of Victory in Crisis and Regional War

- Having 'gone to school' on the American way of war, what did Russia learn?
- What new military thought has it generated to deal with the particular challenges of a regional war against a US-led coalition with significant escalation potential?
- Does it envision winning such a war, including one that crosses the nuclear threshold? How so? What would "winning" mean to Russia?

Roberts, Brad. Chapter 4: "The Second New Problem: Relations with Putin's Russia," in: *The Case for U.S. Nuclear Weapons in the 21st Century*. Stanford University Press, Stanford, CA, 2015.

In Chapter 4 of his book, Roberts summarizes Russian concepts for war with the West as it was reflected in Russian military literature up to 2014. He sets out the argument that Russian leaders have developed concepts to secure their interests in crisis and war and also peacetime, in what he describes as theories of victory in the spirits of Clausewitz and Sun Tzu.

Covington, Stephen. "The Culture of Strategic Thought Behind Russia's Modern Approaches to Warfare." Cambdridge, Massachusetts: Harvard University, Belfer Center for Science and International Affairs, 2016.

https://www.belfercenter.org/sites/default/files/legacy/files/Culture%20of%20Strategic%20Thought%203.pdf.

Covington identifies four "pillars" of Russian strategic culture. The first is systematic rejection of foreign military doctrines and favoring a "homegrown" strategy. The second is Russian recgnition of its own strategic and technological vulnerability, which motivates military opportunism and forces Russia to prepare for surprise attacks by its adversaries. The third pillar is a unified national response to any aggression, assuming escalation will happen. The fourth pillar is the belief that the first stage of war defines how the rest of it will go, thus controlling the initiative in peacetime, in crisis, and in war is essential to achievement of Moscow's political goals.

Johnson, Dave. "Russia's Conventional Precision Strike Capabilities, Regional Crises, and Nuclear Thresholds." *Livermore Papers on Global Security*, No. 3., Livermore, California: CGSR, 2018. https://cgsr.llnl.gov/content/assets/docs/Precision-Strike-Capabilitiesreport-v3-7.pdf.

This Livermore Paper explores nuclear thresholds in Russian military doctrine with an eye to understanding how Russian thinking integrates the operational effects of conventional strikes with nuclear deterrence and coercion. The paper contributes to a debate about the place of escalate-to-deescalate strategies in Russian military thought and the prospects for Russian nuclear employment in a regional confrontation with NATO.

Kofman, Michael. "It's Time to Talk About A2/AD: Rethinking the Russian Military Challenge". War on the Rocks, September 2019.

https://warontherocks.com/2019/09/its-time-to-talk-about-a2-ad-rethinking-the-russian-military-challenge/.

Kofman asserts that Russian strategy originates from coherent thought about technology, operational art, and strategy. A2/AD is only a small part of this, and Russia's view of adversaries should be understood as a system with independent "components" to defeat. In case of war, the "systema" strategy prioritizes attacking vital components of the adversary, such as Command, Control, and Communications, which are needed to function as an integrated system.

Adamsky, Dmitry (Dima). "Cross-Domain Coercion: The Current Russian Art of Strategy." *Proliferation Papers*, No. 54, Paris, France: IFRI, 2015. https://www.ifri.org/sites/default/files/atoms/files/pp54adamsky.pdf.

The paper analyzes the evolution of Russian views on coercion from the post-Cold War "regional nuclear deterrence" thinking to the "Gerasimov Doctrine." The author argues that current Russian operational art involves a nuclear dimension that can only be understood in the context of holistic coercion campaign, an integrated whole in which non-nuclear, informational, and nuclear capabilities can be used for deterrence and compellance.

Blank, Stephen J., Chapter 1: "Introduction," in: *The Russian Military in Contemporary Perspective*, edited by Stephen J. Blank. Strategic Studies Institute, Army War College, Carlisle, PA, 2019.

https://ssi.armywarcollege.edu/pubs/display.cfm?pubID=1389.

In the introductory chapter to the edited volume, Blank asserts that conventional Russian military strategy is similar to Soviet strategy, relying on speed and opportunism to accomplish objectives. The technology and complexity of conventional operations has grown to facilitate a fait accompli favorable to Russia. Russian nuclear policy is now more aggressive, with the possible preemptive use of nuclear weapons.

Zysk, Katarzyna. "Escalation and Nuclear Weapons in Russia's Military Strategy." *The RUSI Journal*, Vol. 163, No. 2, 2018. https://doi.org/10.1080/03071847.2018.1469267.

The author challenges the criticism around the 2018 U.S. NPR, arguing that Russia has, in fact, developed a strategy of limited nuclear first use, and that various strategic documents and official statements confirm this conclusion. The author contends that despite having shifted to favor strategic conventional weapons in recent years, Moscow maintains the nuclear component of its systems. Moreover, the notions of "offense" and "defense" are not so clear-cut in Russian deterrence thinking or strategy.

Panel 3: China's Theory of Victory in Crisis and Regional War

- Having 'gone to school' on the American way of war, what did China learn?
- What new military thought has it generated to deal with the particular challenges of a regional war against a US-led coalition with significant escalation potential?
- Does it envision winning such a war, including one that crosses the nuclear threshold? How so? What would "winning" mean to China?

Roberts, Brad. Chapter 5: "The Evolving Relationship with China", in: *The Case for US Nuclear Weapons in the 21st Century*. Stanford University Press, Stanford, CA, 2015.

This chapter embeds a discussion of China's "theory of victory" in peacetime, crisis, and war in a broader discussion of the evolving China-US strategic relationship. In contrast to the Russian approach, China's set of concepts give a much less prominent place to nuclear weapons. But like Russia, China conveys confidence in its ability to manipulate the perceptions of costs and risks of the United States and its allies sufficient to induce war termination on terms acceptable to Beijing.

"Chapter 2, Section 2: China's Military Modernization: Implications for the United States", in: 2018 Report to Congress. U.S. Government Publishing Office, Washington D.C: US-China Economic and Security Review Commission, 2018.

https://www.uscc.gov/sites/default/files/Annual Report/Chapters/Chapter%202%20Section%202-

%20China%27s%20Military%20Reorganization%20and%20Modernization%2C%20Implications% 20for%20the%20United%20States 0.pdf.

This section of the Annual Report of the US-China Economic and Security Review Commission details the implications of the PLA's modernization efforts for the United States. The authors conclude that Xi Jinping has moved China's military modernization timeline forward 15 years; the PLA's Strategic Support Force poses a challenge to the United States in multiple domains; China will continue to be a gray zone threat; and that the China challenge will be most evident in the maritime, air, and information domains.

Cozad, Mark. R, Chapter 5: "Toward a More Joint, Combat Ready PLA," in: *Chairman Xi Remakes the PLA*, edited by Phillip C. Saunders et al. National Defense University Press, Washington DC, 2019.

https://inss.ndu.edu/Portals/82/Documents/books/Chairman-Xi.pdf?ver=2019-03-14-110008-073.

Chapter 5 of this edited volume provides an overview of PLA efforts to become a more joint force, in order to "fight and win informationized wars." The main driver of Chinese efforts are lessons learned from watching how the United States fought in the First Gulf War and in Kosovo. A premium has thus been placed on air and naval power in order to engage in "noncontact warfare". Xi's reforms have also introduced considerable cultural reform and thus will allow for long-term change.

Laird, Burgess. "War Control: Chinese Writings on the Control of Escalation in Crisis and Conflict." Washington, DC: CNAS, 2017.

https://s3.amazonaws.com/files.cnas.org/documents/CNASReport-ChineseDescalation-Final.pdf?mtime=20170328141457.

This paper provides a summary of Chinese writings on escalation control. The Chinese military theorists believe that a "crisis" is only an intermediary state on an escalation ladder. This leads to either the continuation of the crisis, war, or "new peace". The PLA thinking also considers a broader concept of deterrence, which is not entirely unfamiliar in the West. The paper concludes with several suggestions for the future, including an increased need to read PLA publications, something often neglected in the West.

Kaufman, Alison A. and Daniel M. Hartnett. "Managing Conflict: Examining Recent PLA Writings on Escalation Control." Alexandria, Virginia: CNA, 2016. https://www.cna.org/cna_files/pdf/DRM-2015-U-009963-Final3.pdf.

Kaufman and Hartnett consider much of the same writing that Laird analyzed. However, they note several new stages of Chinese thinking on crises. These stages are: "crisis", "military crisis", "armed conflict", "local war", and "total war". The paper notes that the PLA thinks a lot about escalation control. One of the main conclusions is that PLA thinking leaves enough ambiguity as to their precise posture, creating a risk of unintended escalation.

Cunningham, Fiona and M. Taylor Fravel. "Assuring Assured Retaliation: China's Nuclear Posture and US-China Strategic Stability." *International Security*, Vol. 40, No. 2, Fall 2015. https://www.mitpressjournals.org/doi/10.1162/ISEC a 00215.

This journal article details China's nuclear posture and its implications for strategic stability. The authors conclude that China is unlikely to abandon its nuclear strategy of assured retaliation. Instead, China will modestly expand its arsenal, increase the sophistication of its forces, and will continue to use the ambiguous threat of nuclear retaliation to deter a conventional attack on its nuclear arsenal. In their view, China's efforts could backfire by increasing the risk that nuclear weapons could be used in a crisis between the United States and China.

Johnson, James Samuel. "China's Evolving Approaches to Nuclear 'War-Fighting': An Emerging Intense US—China Security Dilemma and Threats to Crisis Stability in the Asia Pacific." *Asian Security*, March 2018. https://www.tandfonline.com/doi/full/10.1080/14799855.2018.1443915.

Johnson's piece highlights several ways China's approach to nuclear warfighting is evolving. First, he notes, there is increasing convergence between China's offensive conventional strategy and its nuclear weapons doctrine. Second, Chinese approaches to strategic deterrence have in fact evolved to increasingly blur conventional and nuclear capabilities at all levels of escalation. Johnson argues that Chinese views on deterrence emphasize minimalism, ambiguity, flexibility, and patience. He concludes, Beijing's

heightened threat perceptions may lower the nuclear threshold, and precipitate the development of a formal warfighting doctrine.

Panel 4:

Gray Zone Strategies to Gain Wartime Advantages

- How do Russia and China utilize confrontation in the Gray Zone to try to set some of the conditions for success in regional war?
- Do they see long-term competition in the Gray Zone as shifting the balance of power and influence to their advantage? Why? Why not?

Mazarr, Michael J. *Mastering the Gray Zone: Understanding a changing era of conflict.* Strategic Studies Institute and U.S. Army War College, Carlisle, Pennsylvania, 2015. https://ssi.armywarcollege.edu/pdffiles/PUB1303.pdf.

Mazarr offers a comprehensive analysis of a concept of the Gray Zone conflict and distinguishes it from related notions such as hybrid, nonlinear, and unconventional warfare. Building on the concept of "strategic gradualism," Mazarr provides examples of the Chinese and Russian Gray Zone campaigns in the South China Sea and Eastern Europe respectively. The comprehensive analysis concludes with the Author's hypotheses about the future of Gray Zone conflict.

Morris, Lyle J. et al. *Gaining Competitive Advantage in the Gray Zone*. Santa Monica, California: RAND Corporation, RR-2942-OSD, 2019.

https://www.rand.org/pubs/research reports/RR2942.html.

This RAND report categorizes and provides specific examples of different Gray Zone tactics used in the recent past by Russia and China, including misinformation campaigns, cyberattacks, and economic coercion. The report demonstrates how Gray Zone actions prove advantageous for Russia and China, helping them achieve significant gains with minimal risk, and explores how to best respond to such challenges.

Baabage, Ross. "Winning Without Fighting: Chinese and Russian Political Warfare Campaigns and How the West Can Prevail." Washington, DC: CSBA, July 2019.

https://csbaonline.org/research/publications/winning-without-fighting-chinese-and-russian-political-warfare-campaigns-and-how-the-west-can-prevail.

The report consists of two volumes. Volume I of reviews the nature and track record of recent Chinese and Russian political warfare operations. Volume II considers the lessons from eight illustrative case studies and proposes potential counterstrategies. The author concludes that failing to properly address a political warfare challenge from Russia and China risks a further shift in the global balance of power, the loss of additional strategic space, a serious weakening of allies and international partners, a demoralization of the democratic world, and an emboldening of authoritarian regimes to launch new and more threatening campaigns.

Belo, Dani. "Conflict in the Absence of War: A Comparative Analysis of China and Russia Engagement in Gray Zone Conflicts." Canadian Foreign Policy, 2019.

https://www.tandfonline.com/doi/full/10.1080/11926422.2019.1644358.

Belo highlights differences in how Russia and China utilize Gray Zone conflicts to advance their interests. He argues that disparities between the two countries result from "offensive momentum" of rising China and "retreating momentum" of declining Russia. In Belo's view, a permissive strategic environment has put Russia and China in advantageous position vis-à-vis democracies. As Gray Zone actions have been largely successful and because they are difficult to deter, they are likely to become increasingly prominent.

Galeotti, Mark. "(Mis)Understanding Russia's two 'hybrid wars.'" *Eurozine*, 2018. https://www.eurozine.com/misunderstanding-russias-two-hybrid-wars/?pdf.

Galeotti focuses on Russia's motivations and thought framework, claiming that the so-called Gerasimov Doctrine was largely misunderstood in the West. He argues that Russia's operations in the Gray Zone are rooted in Soviet practices, Russia's pragmatism that prioritizes the political effects over the means, its longstanding capabilities to conduct covert political attacks and gamesmanship, and the particular political nature of Putin's Russia. In Galeotti's view, *Putinism* and the characteristics and internal organization of the post-soviet regime much better explain Russia's Gray Zone operations than its geopolitical position. Ultimately, however, Russia's Gray Zone actions result from Russia's weakness.

Panel 5: A Blue Theory of Victory in Regional War under Red's Nuclear Shadow

- What concepts should guide US and allied actions?
- What can and should the US and its allies do to affect Red's deterrence calculus and confidence in managing escalation risks so that he refrains from horizontal and vertical escalation?
- What are the particular challenges of integrating conventional and nuclear deterrence?
- What would winning mean?

Roberts, Brad. Chapter 3: "The New Regional Deterrence Strategy", in: *The Case for US Nuclear Weapons in the 21st Century*. Stanford University Press, Stanford, CA, 2015.

This chapter sets out a "Blue theory of victory" as it took shape in the 1990s and early 2000s, at a time when the U.S. military planning was focused primarily on what were then called major theater wars with a WMD dimension—that is, regional wars against rogue regimes potentially willing to employ WMD in last resort to prevent regime removal. The associated set of ideas focused almost entirely on securing U.S. and allied interests in crisis and war, with little attention to "peacetime" conflict and the Gray Zone.

Colby, Elbridge. "How to Win America's Next War." *Foreign Policy*, May 2019. https://foreignpolicy.com/2019/05/05/how-to-win-americas-next-war-china-russia-military-infrastructure/

This essay details what America must do to win its next war. Colby contends that if the United States does not adapt its defense strategy, it risks losing a war or having to back down in a crisis. He argues that past US approaches to conflict will no longer be successful as Russia and China have tailored their strategies to counter American power projection capabilities. Colby argues that the United States must forgo further involvement in secondary conflicts and rethink US relationships with allies. This should include increased burden sharing as US forces are simply not large enough, at present, to adequately counter all threats.

Dougherty, Chris. "Why America Needs a New Way of War." Washington, DC: CNAS, June 2019. https://www.cnas.org/publications/reports/anawow.

Dougherty asserts that the possibility of a US loss in a great power war is real. The United States has taken its military supremacy for granted and turned its focus towards rogue and non-state adversaries. The American strategy to rectify these issues has often been the pursuit of a technological "silver bullet". The main section of the paper details how America currently intends to fight a war, and how that will no longer work. Dougherty concludes that a new American strategy must induce doubt in adversary decision-making by attacking directly their theories of victory.

Paulauskas, Kęstutis. "The Alliance's Evolving Posture: Towards a Theory of Everything." *NATO Review*, 2018. https://www.nato.int/docu/review/2018/also-in-2018/the-alliances-evolving-posture-towards-a-theory-of-everything-nato/en/index.htm.

Citing the Olympic motto, "Citius, altius, fortius" (Faster, Higher, Stronger), Paulauskas details NATO's evolving posture. He notes that although the attention and scrutiny of the expert community is welcome, it often overlooks the unique nature of NATO's business and mandate. In the paper, Paulauskas attempts to dispel certain myths, including the oft repeated "the Baltics will fall in 48 hours." In conclusion, the article states that journalists, think tankers, and academics must exercise patience - how NATO's posture has evolved and will evolve, will become clear in due course.

Townshend, Ashley. Brendan Thomas-Noone, Matilda Steward. "Averting Crisis: American Strategy, Military Spending and Collective Defence in the Indo-Pacific." The United States Studies Center (USSC), Sydney, Australia: University of Sydney, 2019.

https://www.ussc.edu.au/analysis/averting-crisis-american-strategy-military-spending-and-collective-defence-in-the-indo-pacific.

This report reviews in detail the waning of American military supremacy. Its specific focus is the Indo-Pacific region and the emerging military threat from China to U.S. power projection capabilities. Part 1 details the strategic challenges facing the United States in the region, which include Chinese adventurism. Part 2 elaborates on the issues and

constraints of the U.S. defense budget. Part 3 describes in detail the many ways in which the US military in the Indo-Pacific region has "atrophied." The authors conclude that the U.S. military is now unable to achieve the "conventional deterrence by denial" outlined in the NDS. The report recommends pursuing 'collective deterrence', expanding high-end exercises, and acquiring robust land-based strike capabilities.

Manzo, Vincent A. "After the First Shots: Managing Escalation in Northeast Asia." *Joint Force Quarterly*, no. 77, 2015.

https://ndupress.ndu.edu/Portals/68/Documents/jfq/jfq-77/jfq-77 91-100 Manzo.pdf.

Writing about an often-overlooked topic, what happens "after the first shots," Manzo details how both deliberate and inadvertent escalation can be managed in the Indo-Pacific region. Ambiguities in Chinese policy and strategy mean that the United States should focus on controlling escalation at lower levels. This could be done, for example, through declaratory statements which promise reciprocal restraint in the space and cyber domains. Manzo concludes by suggesting that the United States must reconsider how it thinks about the effects of potentially escalatory actions, and this effort to 'rethink' must be institutionalized.

Peters, Robert, Justin Anderson, and Harrison Menke. "Deterrence in the 21st Century: Integrating Nuclear and Conventional Force." *Strategic Studies Quarterly*, Vol. 12, No. 4., 2018. https://www.airuniversity.af.edu/Portals/10/SSQ/documents/Volume-12 Issue-4/Menke.pdf.

The authors argue that the United States faces numerous challenges to integrate conventional and nuclear capabilities in a way that adequately counters Russia, China and North Korea. Four recommendations are provided. First, the Geographic Combatant Commands (GCCs), STRATCOM, and the National Command Authority (NCA) must increase efforts to react quickly to a conflict with a nuclear dimension. Second, combatant commanders must revise current plans to integrate conventional and nuclear capabilities. Third, DOD should update exercises to require this integration. And fourth, the above organizations must develop new models for countering adversary nuclear aggression.

Panel 6: And What if the War Remains Neither Conventional nor Regional?

- What are the particular challenges of terminating a war that has gone nuclear in a limited way and/or involves non-nuclear attacks on the US homeland?
- What would "winning" mean to both Red and Blue? To US allies? How might the desire to shape the post-war peace influence US and allied decisions about war termination?
- Are there particular new challenges of conventional/nuclear integration after initial nuclear use?

Warden, John K. "Limited Nuclear War: The 21st Century Challenge for the United States". *Livermore Papers on Global Security*, No. 4. Livermore, California: CGSR, 2018. https://cgsr.llnl.gov/content/assets/docs/CGSR LP4-FINAL.pdf.

This Livermore Paper explains why adversaries like China, North Korea, and especially Russia, are developing doctrines and capabilities that give them the option to employ nuclear weapons in a limited fashion, and potentially early in the conflict. Warden argues that such strikes could be seen as useful for quickly ending the conflict, increasing the credibility of escalation threat, achieving instrumental benefits, or terrorizing decision makers in rival states. The author considers factors that may either discourage or incentivize these countries from employing nuclear weapons in the context of a regional conflict.

Manzo, Vince A., John K. Warden. "After Nuclear First Use, What?" *Survival*, Vol. 6, No. 3, 2018. https://www.tandfonline.com/doi/full/10.1080/00396338.2018.1470770.

In this article, Manzo and Warden speculate about what would happen if an adversary launches a limited nuclear strike with the expectation of winning the conflict while convincing Washington to refrain from bringing its full strategic—military power. They explain variables the U.S. must take into account while considering response to nuclear attack, including American allies' reactions. The authors use scenarios of confrontations with Russia and North Korea to illustrate that "there will be no easy answers after a nuclear attack." Because mapping out every likely contingency is impracticable, simulations, table-top exercises and war games are necessary to better prepare decision makers if the time comes.

Miles, Aaron. "Escalation Dominance in America's Nuclear Strategy." War on the Rocks, September 2018.

https://warontherocks.com/2018/09/escalation-dominance-in-americas-oldest-new-nuclear-strategy/.

In this article, Miles analyzes the 2018 U.S. Nuclear Posture Review and its two main escalation control strategies: Flexible Response (intended for major nuclear powers such as China or Russia) and Escalation Dominance (intended for minor powers such as North Korea). The former seeks to deny confidence on the adversary's ability to win and discourage escalation, while the latter seeks to ensure one's own ability to win in any level of conflict.

Binnendijk, Hans, David Gompert. "Decisive Response: A New Nuclear Strategy for NATO." *Survival*, Vol. 61, No. 5, 2019. DOI: 10.1080/00396338.2019.1662119.

The authors argue that NATO's nuclear posture needs to be better signaled in order to be an effective deterrent. They emphasize that NATO must dissuade Russia from believing that by resorting to nuclear threats during the conflict it can deter NATO from conventional strikes on targets on Russia's territory which destruction is critical to success of the Alliance's military operations. The authors propose a new NATO nuclear

strategy that they term Decisive Response, centered on efforts to dispel any Russian doubts on NATO's willingness to carry through with nuclear retaliation.

Sugden, Bruce M. "A Primer on Analyzing Nuclear Competitions." *Texas National Security Review*, Vol. 2, No. 3., Austin, Texas, July 2019. https://tnsr.org/2019/07/a-primer-on-analyzing-nuclear-competitions.

Sugden analyzes nuclear competition and its key features, presenting a framework to understand such competition. He argues that limited nuclear wars are possible, particularly when the objective is not to destroy the opponent or overthrow its government, and cities Russia as an example of a political and military establishment that believes that limited nuclear wars are possible.

Panel 7: Defining the Particular Requirements of Deterrence in the 2nd Theater

- What risk is being accepted in current strategy?
- What is being done to reduce that risk? What more can U.S. allies do to help compensate for the weakened conventional deterrent of the United States?
- What concepts should guide the practice of extended deterrence in this context?

Selected Publications from the Joint Staff:

- Everstine, Brian. "Joint Staff Evolving its Planning to Implement the National
 Defense Strategy." Air Force Magazine, 2019.
 http://www.airforcemag.com/Features/Pages/2019/May%202019/Joint-Staff-Evolving-its-Planning-to-Implement-National-Defense-Strategy.aspx.
- "Global Integration Maintaining a Competitive Advantage." Partial Transcript of Statement by General Joseph F. Dunford, Jr., 2018.
 https://www.jcs.mil/Media/News/News-Display/Article/1681761/global-integration-maintaining-a-competitive-advantage/.

Mitre, Jim. "A Eulogy for the Two-War Construct." *Washington Quarterly*, Vol. 41, No. 4., 2019. https://www.tandfonline.com/doi/full/10.1080/0163660X.2018.1557479.

In this article, Mitre tracks the evolution of the U.S. force-planning construct, which describes how DoD sizes, shapes, and develops U.S. military forces. He argues that the two-war construct under which the DoD structured the military that could defeat two regional powers in overlapping timeframes should no longer be the central basis to evaluate the potential performance of the U.S. military. He explains why the 2018 NDS force planning construct for great power war is more appropriate for an era of great power competition.

Brands, Hal. "What if the U.S. Could Fight Only One War at a Time?" *Bloomberg*, 2019. https://www.bloomberg.com/opinion/articles/2019-06-11/two-war-strategy-overhaul-creates-many-risks.

Brands explains the merits of American shift into single-war great power force construct. Yet, he agrees with the criticism of the NDS Commission that it remains unclear how the U.S. plans to deter an opportunistic major power in one region in a scenario in which America is already engaged in major power conflict in the other region. Brands warns that the existing risks of being caught shorthanded during a war could also have significant peacetime ramifications for the U.S. and its allies.

Bonds, Timothy M., et. al. *America's Strategy-Resource Mismatch*. Santa Monica, California: RAND Corporation, 2019. RR-2691.

https://www.rand.org/pubs/research reports/RR2691.html.

The authors of the report argue that there is a gap between the U.S. resources and capabilities and the 2018 NDS requirement that during wartime the U.S. must be "be capable of: defeating aggression by a major power; deterring opportunistic aggression elsewhere; and disrupting imminent terrorist and [weapons of mass destruction] threats." They identify specific gaps between U.S. security policy and U.S. military capabilities and capacity; propose a framework for prioritizing resource allocation; and identify combinations of near-term investments in military capabilities, technical innovations, and new geopolitical initiatives and concepts that together could reduce an adversary's opportunities.

Ochmanek, David, et. al. *U.S. Military Capabilities and Forces for a Dangerous World.* Santa Monica, California: RAND Corporation, 2017. RR-1782-1-RC. https://www.rand.org/pubs/research_reports/RR1782-1.html.

This report concludes that U.S. forces today are larger than necessary to fight a single major war but have failed to keep pace with the modernizing forces of great power adversaries and are poorly postured and trained to meet key challenges in Europe and East Asia. The authors offer three alternative force planning constructs which can help ensure that defense resources are applied to the highest-priority needs.

Panel 8: On Out-Partnering and Out-Thinking US Adversaries on this Topic

- What can and should be done to accelerate concept development and military thought for this problem?
- What can be done to improve the utility of wargaming and other analytical techniques for these purposes?
- How can substantive collaboration among the United States and its allies be strengthened?

Advances in Defence Analysis, Concept Development and Experimentation: Innovation for the Future, edited by Bianca Barbu, David Martin, and Lora Hadzhidimova. Norfolk, Virginia: NATO, Headquarters Supreme Allied Commander Transformation, 2019.

https://www.act.nato.int/images/stories/media/capdev/capdev_03.pdf.

This report makes the case for concept development and experimentation (CD&E) to stay ahead of disruptive technologies and respond to asymmetric and unpredictable threats. Part 1 offers an introduction to CD&E, including national approaches (Sweden, Belgium) which highlight the link between CD&E and changes in culture. Part 2 presents relevant techniques and methodologies, including Table-Top Experiments (wargaming). Chapters 7 and 9 showcase the application of CD&E to real life challenges.

Work, Robert, and Paul Selva. "Revitalizing wargaming is necessary to be prepared for future wars." *War on the Rocks*, December 2015.

https://warontherocks.com/2015/12/revitalizing-wargaming-is-necessary-to-be-prepared-for-future-wars.

The authors examine the lack of coordination and communication between the wargaming community and the senior level decision-makers, who are often unaware of these wargaming insights. Work and Selva recommend several improvements: (1) creating a wargaming repository to better analyze wargames' results, (2) establishing a Defense Wargaming Alignment Group (DWAG) to close the gap between the wargaming community and senior leaders, and (3) including allies in wargaming exercises.

Goldblum, Bethany L., Andrew W. Reddie & Jason C. Reinhardt. "Wargames as experiments: The Project on Nuclear Gaming's SIGNAL framework." *The Bulletin of the Atomic Scientists*, May 2019. https://thebulletin.org/2019/05/wargames-as-experiments-the-project-on-nuclear-gamings-signal-framework/.

This article discusses the Project on Nuclear Gaming (PoNG), an initiative to study deterrence through experimental wargaming led by UC Berkeley in partnership with Lawrence Livermore National Laboratory and Sandia National Laboratories. The authors argue that wargaming has the potential to provide a tool for policy-makers and academics to think about future conflicts when data and precedents are scarce.

Barzashka, Ivanka. "Wargaming: how to turn vogue into science." *The Bulletin of the Atomic Scientists*, March 2019.

https://thebulletin.org/2019/03/wargaming-how-to-turn-vogue-into-science/?utm_source=Bulletin%20Newsletter&utm_medium=iContact%20email&utm_campaign=Wargaming_03152019.

Barzashka argues that wargaming, as so far practiced, is more art than a science, meaning that scientific methods are not fully utilized to derive testable hypotheses and enable cumulative insights. Barzashka makes the argument that "If wargaming tools are to underpin evidence-based analysis that informs national security and defense policy, wargames should adhere to scientific standards." This cultural attribute of gaming is an

obstacle, she argues, to widespread acceptance in academic circles. It is also a barrier to accomplishing the objectives set out by Selva and Work in 2015.

Binnendijk, Hans. *Friends, Foes, and Future Directions: U.S. Partnerships in a Turbulent World.* Santa Monica, California: RAND Corporation, 2016. RR-1210-RC. https://www.rand.org/pubs/research_reports/RR1210.html.

Binnendijk argues that if the US is dragged into a future conflict, it will most likely be a result of a commitment to allies. He identifies an imbalance in current US partnerships resulting from: lack of adaptability, inadequate defense budgets, and a misalignment of interests and values between the U.S. and its allies. The author then examines three alternative U.S. approaches to these problems: (1) Assertive Engagement, (2) Collaborative Engagement, and (3) Retrenchment. Binnendijk concludes that if the US properly manages its partnerships, it could yield a "new trilateralism that might encompass the pivot to Asia, reinforce transatlantic ties, and provide greater partner support to manage instability in the Middle East."

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